



Attorney Docket No. ZIP 2296  
Express Mail  
Label No. EL888470745  
Deposit Date 12/14/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Klaus DRAENERT

Art Unit:

Application No: 09/919,179

Examiner:

Filed: July 30, 2001

For: MODULAR REVISION PROSTHESIS

PRELIMINARY AMENDMENT

U.S. PATENT AND TRADEMARK OFFICE  
P.O. Box 2327  
Arlington, Virginia 22202

Sir:

Please make the following amendments to this application prior to calculating the official filing fee.

AMENDMENTS

In the Claims:

Claims 3-15, cancel.

Add new claims as follows:

16. (New) The femoral component of claim 1, designed such that the femur stem axis coincides with the femur canal axis, and in the frontal plane the collum-centrum axis forms an angle with the diaphysial axis (CCD angle) of between 125° and 145°, as a rule 135°, and in the axial top view has an angle between the diaphysis and the screw neck axis - the "antetorsion angle" - of between 5° and 15°, as a rule 7°.

17. (New) The femoral component of claim 1, designed such that the ventral surface is curved in a convex manner in the axial aspect and is curved in a concave manner in the ventral aspect, such that the center of curvature is in the ventral position and the radius of curvature decreases continuously in the proximal direction (parabola).

18. (New) The femoral component of claim 1, designed such that the medial outer surface is curved in a convex manner in the axial aspect and, along the medial contour, is curved in a concave shape, in such a way that the center point of outer wall curvature is medial, and its radius decreases continuously in the proximal direction (parabola).

19. (New) The femoral component of claim 1, designed such that the dorsal outer surface of the stem has a convex-concave-convex curvature moving around the axis proximally from lateral to medial in the form of a breaking wave or a rounded "3" having asymmetric halves and a round transition.

20. (New) The femoral component of claim 1, constructed such that the lateral outer surface is designed to protrude in a substantially linear, cylindrical or conical shape in the proximal direction, or to protrude in a cylindrical shape in the lateral direction.

21. (New) The femoral component of claim 1, embodied such that the ventral surface and/or medial surface and/or dorsal surface and/or lateral surface is/are structured by means of coaxially aligned longitudinal ribs.

22. (New) The femoral component of claim 1, designed such that the stem makes a transition via a shoulder component (head-neck-stem-transition) to the cone, which, as a modular system, can accommodate various heads in centered or eccentric positions, and which may have a central hole for accommodating a tension anchor.

23. (New) The femoral component of claim 1, constructed such that the cone has a hole drilled through it axially, coaxially, or at an angle for accommodating a tension anchor or tension screw, or the shoulder has additional holes for accommodating additional tension anchors having wires or cables and/or thrust/tension rods and/or tension screws.

24. (New) The femoral component of claim 1, constructed such that the cone is oriented between  $2^{\circ}$  and  $9^{\circ}$ , as a rule  $5^{\circ}$ , in such a way that the CCD angle does not change and the offset also remains unchanged, however the axis of the cone projects into the

laterodorsal circumference of the compact femur 2-4 cm below the tuberculum innominatum.

25. (New) The shoulder component of claim 23, constructed such that in a plurality of levels holes are provided for accommodating tension anchors to the dorsal, lateral, and ventral femur wall.

26. (New) The metaphysial component of claim 23, constructed such that in a plurality of levels holes are provided for accommodating tension anchors to the dorsal, lateral and ventral femur wall.

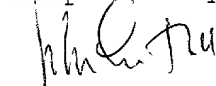
27. (New) The femural component of claim 1, constructed such that the implant is made of titanium, tantalum, CoCrMo, or an alloy of titanium, tantalum, or of stainless steel.

28. (New) The femural component of claim 1, constructed such that the surface of the proximal half has a roughness of 50-250  $\mu\text{m}$ , preferably 80-150  $\mu\text{m}$ .

REMARKS

The above amendments are presented in order to place this application in better condition for examination.

Respectfully submitted,



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